BY ORDER OF THE COMMANDER 301ST FIGHTER WING

301st FIGHTER WING INSTRUCTION 21-125 10 April 1997

Maintenance

WELDERS CERTIFICATION PROGRAM



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction identifies procedures to certify welders. It applies to all maintenance activities in the 301 Logistics Group (LG), 301st Maintenance Squadron (MXS), NCOIC structural fabrication and NCOIC welding shop making them accountable for compliance. This instruction implements AFPD 21-1, *Managing Aerospace Equipment Maintenance*; AFI 21-105/AFRC Sup, *Aerospace Equipment Structural Maintenance*; T.O. 00-25-252, MIL-STDS 1595 and 410.

SUMMARY OF REVISIONS

This revision changes Para 1.1.1. 4130; Group I, 1.1.3.P & H Stainless (A286); Group III, 1.1.5.Nickel (INC 718); Group V and 1.1.7. Cobalt; Group VIII has been deleted from welding requirements.

1. Welding Requirements:

- 1.1. The following groups are required to be welded to support the 301st Fighter Wing mission requirements.
 - 1.1.1. Martensitic Stainless 410 Group II.
 - 1.1.2. Aluminum (6061) Group IV.
 - 1.1.3. Titanium (T16A14) Group VI.
- 1.2. Reservists are required to weld at Level I and air reserve technicians at Level II. Welders must re-qualify every five years.
- 1.3. If the 301st supported weapon system remains the same since last qualification of welders assigned, the recompilation of the qualifications group requirement can be submitted at the time of the welders re-qualifications (every 5 years).

- 1.4. A copy of the qualification group requirement will be sent to HQ AFRC/LGMAB and 10AF/LGM.
- 1.5. The NCOIC of structural fabrication is the assigned office of primary responsibility to observe, coordinate, and verify the welder certification program for MXS.
- 1.6. Certification approval/disapproval will be based on completion of required weld specimens, specimen evaluation results, and welder's performance of assigned duties. Certification will not be delegated below branch level.

2. Procedures:

- 2.1. The unit may prepare base metals or procure base metal from supply.
- 2.2. Welder must weld joints as specified in TO 00-25-252 procedures.
- 2.3. Welders must qualify for each combination of welding process, base metal group, base metal thickness, welding position, base metal form, and weld type in which the welder works.
- 2.4. The structural fabrication NCOIC will observe and verify all welding processes are accomplished according to TO 00-25-252. Fill out the AF Form 1017, **Application and Test Record for Qualification of Welder** and sign as the observing official.
- 2.5. The technician who performed the welding task will sign in the applicant signature area.
- 2.6. The AF Form 1017 and the welded coupons by group/person will then be boxed and sent to OO-ALC/TIELM, 7278 4th St., Hill AFB, UT 84056-5205 for evaluation. Unit will sign the testing in block 15 and sign the certifying official in block 16.
- 2.7. Reimbursement for testing/certification will be sent to 301st Finance/Budget.
- 2.8. Test results will be documented on AF Form 1017. A copy of each certified welder's AF Form 1017 will be on file in the metals technology shop; the original copy is located in the supervisor's office. Maintain according to AFMAN 37-139, **Records Disposition Schedule**.

BOB L. EFFERSON, Colonel, USAFR Commander